## Preface

This volume relates how the traditional tasks of American military engineers changed and new ones developed in response to the tactical and logistical demands of World War II, and how the Corps of Engineers organized, equipped, and trained its troops in the United States to carry out these tasks overseas. The book is necessarily concerned with machines as well as men because the modern Corps which emerged during this period was an organization that increased its capacity for work to the fullest extent possible by the adoption of power machinery. Dependence upon complicated machines, delicate instruments, and complex rather than simple engineering techniques was a natural accompaniment of world-wide military trends, but the situation nevertheless challenged those charged with plans and preparations to a full display of intelligence and adaptability.

More than half a million Engineer officers and enlisted men were in the armed forces by the spring of 1945, comprising about 8 percent of the Army. Most of them were building or rebuilding hangars and barracks and offices at a multitude of military bases, laying down or repairing the strips at innumerable airfields, and enlarging or improving the endless network of roads and culverts and bridges. Some were installing and operating miles of petroleum pipeline. Combat engineers were clearing mine fields. Still other engineers were manning boats and ships, making maps, purifying water, forging and shaping steel, or running sawmills. In all areas of conflict, from battle front to rear bases, with ground and air forces, engineer troops were justifying the years of planning and preparation at home.

The day-to-day problems involved in readying engineer troops for such duties overseas may have appeared simpler to the participants than to the historians who reviewed the whole record later. The files are heavily weighted with the burdens of daily frustrations; successes account for much less space. We have been granted complete freedom to evaluate and interpret, and to present a full and frank appraisal.

Many persons, both within and without the Corps of Engineers, have helped to supplement and clarify the written record. The list is so long indeed that we have had to be content in most cases to let the footnotes be our only acknowledgment. To those who read and commented upon the entire volume—Maj. Gen. Clarence L. Adcock; Col. William W. Bessell, Jr.; Col. William W. Brotherton; Col. Edward H. Coe; Brig. Gen. Miles M. Dawson; Col. Joseph S. Gorlinski; Richard M. Leighton; Lt. Col. David M. Matheson; Lt. Gen. Eugene Reybold; Maj. Gen.

Julian L. Schley; Brig. Gen. John W. N. Schulz; and Lt. Col. Eugene J. White—go our special thanks. Joseph A. Logan of the Office of the Comptroller of the Army conducted a comprehensive review of statistical matter.

Kent Roberts Greenfield, Leo J. Meyer, and Stetson Conn of the Office of the Chief of Military History and our colleagues in the Engineer Historical Division, especially Lenore Fine and Jesse A. Remington, gave us the benefit of their criticism and greatly encouraged us by their understanding and support. David Jaffé and Loretto C. Stevens edited the volume with care and patience. Margaret E. Tackley selected the photographs.

Among the many typists who worked on the manuscript, Dorothy Washington, Elizabeth M. Ralston, Daisy G. Shield, Johanne R. Daggett, and Bettie J. Hazell earned our particular gratitude for their preparation of the final copy. Gerald N. Grob relieved us of many chores in checking and proofreading.

Librarians and clerks in the various records depositories proved untiring in their efforts. To mention Eva Holt, Geraldine Jewell, Mary K. Stuart, and Mae E. Walker is to shorten a long list of persons who rendered this type of service with admirable efficiency. Gladys Z. McKinney answered repeated inquiries about Engineer officers.

Research by Stuart W. Bruchey, Barbara B. Garner, Curtis W. Garrison, Keith Glenn, and Harry E. Ickes has proved helpful in the writing of the book. Useful drafts on mapping, camouflage, and intelligence were prepared by Kenneth J. Deacon and on procurement of equipment before Pearl Harbor by Doris M. Condit. Edna E. Jensen worked up much of the material on procurement of supplies during the later war period.

As to the division of labor among the authors themselves, Miss Coll concentrated primarily upon equipment; Mr. Keith, upon training; and Mr. Rosenthal, upon organization of troop units. Since a number of the chapters are the work of more than one of the authors, and since in some cases we invaded each other's field, there appears to be little advantage in attempting to assign more specific authorship credit. An assumption of collective responsibility best expresses the way in which we have shared in the final product.

Washington, D. C. 25 February 1957

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